



**Irregular Warfare in the Conventional
Theater:
An Operational Perspective**

**A Monograph
by
Major Jim McNulty
Infantry**



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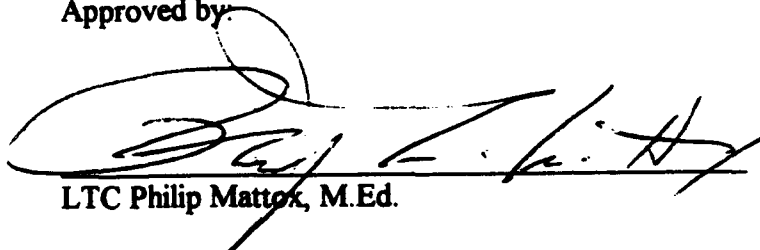
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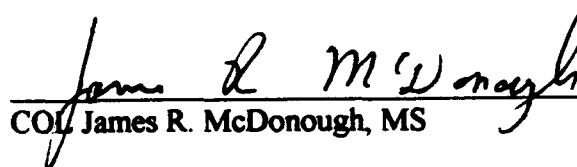
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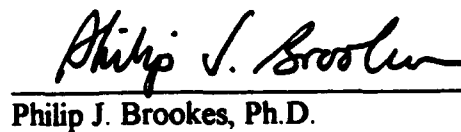
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ABSTRACT

Irregular Warfare in the Conventional Theater: An Operational Perspective, by MAJ James W. McNulty, USA, 64 pages.

The purpose of this monograph is to determine a conceptual framework for the analysis of the problems involved of integrating irregular and conventional forces into the same theater of operations. The problem is considered from the perspective of the operational planner or commander who seeks to use irregular forces as an economy of force measure in conjunction with a conventional force.

The elements of irregular warfare in the conventional theater are derived through the examination of the irregular fighter and irregular units to determine their unique attributes. These attributes are then used to determine the cases where an irregular force can be applied in a conventional theater as an economy of force asset. The elements of irregular warfare in the conventional theater are then used to describe a classic irregular-conventional campaign, the British and Arab effort in Palestine and the Hejaz Desert during World War I. This campaign provides a historical basis for the examination of the problem of integrating irregular and conventional forces, and is used as a medium to consider the elements of operational design and the operational planning process.

A conceptual framework is developed from the considerations identified in the case study, and from the elements of irregular warfare in a conventional theater. The framework uses six concepts that integrate the ideas presented into a unified model that describes the interaction between the two types of forces, and can be used to analyze the factors that bear on the problem of irregular-conventional force integration in a conventional theater. Conclusions are drawn that stress the need for the judicious, and considered application of irregular forces as an economy of force measure.

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I. Introduction

Many of the geographic areas where US vital interests may be threatened in the future have the potential for indigenous irregular forces to act in concert with conventional forces to achieve strategic goals. The role that irregular forces can play; when, why, and how their actions can be integrated into a conventional campaign; and the potential consequences of using an irregular force to assist in achieving a military end state, are all questions that are addressed on a superficial level in our doctrinal literature. The operational commander who attempts to fully integrate irregular warfare into a conventional campaign must make a realistic assessment of the irregular force, and the contribution it can make to the achievement of the end state. Also, he must be able to recognize the potential problems associated with employing the irregular force, and either resolve them, or develop an alternative course of action that compensates for the problems.

Current joint and service doctrinal publications tend to view irregular warfare as an entity separate from conventional operations, or as an adjunct to a conventional operation.¹ In both cases the operational level commander has his focus on conventional forces in a distinct conventional theater. Although this view tends to look good in graphic representations and allows tidy descriptions of theater structure, it ignores the reality of most situations. In many of the areas where US interests may be at stake in the future the potential enemy forces and the potential population base for an irregular force exist in the same area.² In this

situation the operational commander will be afforded the opportunity to fully integrate the actions of his conventional forces with those of an irregular force.

The theater commander who is presented with a potential irregular force asset in a conventional theater is faced with opportunities that can be exploited. At the same time numerous problems may arise that mitigate against, or modify the potential uses of the irregular force. Determining what to do in this case raises a critical question for the commander and his staff: What is the conceptual framework the operational commander should apply as he analyzes and plans for the integration of irregular warfare into a conventional campaign plan as an economy of force measure?³

In order to answer this question it is necessary to first examine the elements of an irregular warfare economy of force action within the context of a conventional campaign. The elements that will be considered are the nature of irregular warfare, the applications and use of irregular forces relative to conventional forces, and the meaning of economy of force at the operational level of war.

These elements will then be used to examine a historical case study of an integrated irregular-conventional operation, the British campaign in Palestine and the Hejaz Desert, 1916-1918. This example demonstrates both the positive and negative aspects of the use of irregular forces in conjunction with conventional forces at the operational level, and highlights the necessity of a thorough analysis of such an operation before undertaking it. The campaign will then be analyzed in

terms of the elements of operational design and the operational functions in order to highlight the significance of the complexities of a fully integrated conventional-irregular theater.

Following the considerations developed from the analysis of the campaign in Palestine a conceptual framework will be constructed to analyze this type of warfare. The framework consists of six components that blend the elements of irregular warfare and operational design and thinking into a unified analysis model that can be applied at the operational level of war. Each of the components is discussed in detail and arranged in a logical hierarchy that facilitates the use of the model to determine what the irregular force is capable of, how they should be employed, and the potential consequences of their use. Conclusions are then drawn that stress the need for the considered application of irregular warfare as an economy of force measure in conjunction with conventional forces.

Several constraints were applied in order to limit the scope of the research question. First, the theater of operations was defined as one in which the principal conflict is between conventional forces. Second, the irregular forces considered were defined as any group that is hostile to the enemy force and indigenous to the area of operations. This includes those groups currently residing in the area, or those that were previously displaced from the area but have a legitimate claim as a part of the population. The size of this force can vary, but it must be sufficient to have an impact from the operational commander's perspective. Third, the irregular forces considered were those under the control of a single commander of a theater

of operations who can apply them as an economy of force measure in conjunction with his conventional forces.

II. The Elements of an Irregular Warfare Based Economy of Force Action in a Conventional Theater

In order to construct a framework to analyze the operational application of irregular warfare as an economy of force measure in a conventional theater a common understanding of the components of the conventional-irregular force integration problem must be reached. There are three general elements involved when considering the integration of both types of forces in this situation. The first is the nature of the irregular force: *What are the inherent characteristics and requirements that guide and limit the force's use at the operational level?* The next is the application and use of the irregular force with respect to the conventional force and the enemy: *Where, when, and under what circumstances can the irregular force be best utilized in conjunction with conventional forces?* Third, is the meaning of economy of force as it pertains to an irregular force in a conventional theater: *What does economy of force mean at the operational level, and what defines the successful use of economy of force measures?*

Each of these elements contains critical considerations that must be understood at the operational level in order to gain a full appreciation for the complexities of integrating these two types of warfare in the same theater to

achieve a military end state. The most fundamental of these is to understand the nature of the irregular soldier and the irregular force.

The Nature of the Irregular Force

The irregular force has two distinct dimensions that describe it and provide a way of viewing the force from the operational perspective. The first is the inherent attributes of the irregular fighter which define him in the human dimension. The other is the unique character of the irregular force which present a set of requirements, and strengths and weaknesses that define irregular units as combat elements that can be woven into the operational fabric.

The typical population base that provides the raw material for the irregular force consists of people from rural or nomadic backgrounds that have a unique social system.⁴ Their lives revolve around small homogeneous communities, clans or a tribal system where a premium is placed on loyalty and cooperation within small, tightly knit groups. The shared experiences of this type of life foster the qualities that provide a good human resource base for the irregular force. A keen sense of observation, familiarity with their locale and its environment, and the customary exchange of information form the basis of day to day life in what are often the demanding physical conditions of a tribal or nomadic existence. The exigencies of this type of life place a premium on skills such as navigation and tracking, handling of small arms, and small group cooperation to survive.

Generally a hierarchical leadership system exists that is based on proficiency in these skills, or on family or clan lineage that extends to the lowest levels of the group. Also, there may be traditions of tribal or clan warfare or competition, raiding, or booty seeking that are an integral part of the society.⁵ Any or all of these characteristics can combine to form a common basis of quasi-military experience. Irregular soldiers can develop in these types of social settings who possess natural military skills, have an existing intelligence system, a merit based leadership hierarchy, and are adept at seeking advantageous situations in times of conflict.

These types of social systems tend to foster self-sufficiency and independence, often virtues for an irregular soldier; however, these same traits can work against the formation of an irregular force when an individual or small group sees that its best interests are not at stake, or when honor, status, or other social sensibilities are offended. Also inter-tribal or clan politics, religious differences, and the desire to remain close to one's home turf can mitigate against the successful formation and maintenance of a durable irregular force.⁶ It appears that for every positive attribute that would tend to promote the formation and proficiency of an irregular force there is a corresponding negative quality that counters it. The critical point is that both good and bad traits exist and must be managed effectively to control an irregular force.

The inherent attributes of the irregular soldier are best exploited by ensuring the irregular force is employed when specific requirements are met.

These requirements constitute the source of strength from which the irregular force draws its power relative to conventional forces. The first requirement is that of the unassailable base.⁷ The irregular force generally fights where they live and because of this they must be assured that their families, clans, or communities are safe from fear of retribution and can subsist without them. The secure nature of the base can stem from either its remoteness or the irregular force's inherent ability to blend into the local fabric. Another aspect of the unassailable base is the area where the irregular unit receives its external support (port, airfield, drop zone, any safe haven, or sanctuary) must be secure. No irregular fighting force can be completely independent of a source of military supply for long. The third aspect of the unassailable base is the idea that an irregular force must be psychologically hardened to withstand the rigors of warfare and enemy psychological operations. It is essential that the irregular unit have a reason to fight that will sustain it throughout the duration of the operation. Whether this source of internal strength is from hatred of an occupying force, religious fanaticism, or the continuing chance to obtain booty, it must be able to sustain them emotionally.

Another requirement is that of a sympathetic population. The irregular force relies on the local population for intelligence, subsistence, and anonymity. They must be able to easily blend into the community or countryside where they operate, and they must be able to rely on the population for the supplies that keep them alive. The most important element they derive from the locals is intelligence. In the types of environments that are most conducive to irregular warfare,

everything the local community knows, the irregular force knows. Ultimately the effect and survival of the irregular force will be measured by the quality and timeliness of the intelligence they receive.

A third requirement revolves around the interrelated concepts of mobility, endurance, and time. In a tactical sense, the irregular force must possess a mobility advantage relative to his enemy to ensure successful escape after an operation. This is achieved by a combination of a means of mobility, the location of an operation relative to any enemy force that can pursue, and the proximity of an area where the force can find sanctuary. This mobility advantage can be enhanced by dispersing forces throughout the intended area of operations, and by relying on the irregular force's lack of dependence on a source of supply. The lack of reliance on a fixed source of supply also grants the irregulars a degree of tactical and operational endurance that can enhance their ability to act over a wide area within the limits of their mobility constraints. Time is the final portion of this requirement. The time it takes to assemble a force, gather intelligence, plan, and act is greatly increased by the clandestine nature of irregular operations. Time requirements tend to increase exponentially as the complexity and the size of the force required increases.⁸

Technical sufficiency is another prerequisite of the irregular force. They must possess the means (weapons, ammunition, demolitions) to accomplish the tasks envisioned for them, and they must have the knowledge to employ those means. The means must be suitable for the tasks, but cannot present an excessive

burden on what is inherently a light, mobile, and unsophisticated force that operates independent of a conventional source of supply.⁹

These means must be applied indirectly against a sophisticated enemy.¹⁰

An enemy that operates in a disciplined, methodical and doctrinal manner presents the types of targets that the irregular is able to have the greatest effect on. Large, well organized conventional forces typically have large, exposed rear and flank areas. The forces that operate in these areas are excessively dispersed, and behave in a consistent and predictable manner. Irregular forces, when applied against these soft spots, tend to have the greatest impact while exposing themselves to the least risk.

The final requirement for the effective utilization of the irregular force is leadership. Internally the irregulars must have a common concept of a chain of command. The leaders must be able to deal with the problems and personalities between what are often disparate groups, and they must possess the technical or informal means to exercise control over extended distances in continually demanding circumstances. In this type of environment decisions are usually made by consensus rather than unilateral decision. The time required to make decisions will increase or decrease in proportion to the amount of consensus that is required, and will depend heavily on the skills of the irregular leader.

These six requirements for the employment of irregular forces, coupled with the inherent qualities of the irregular soldier point out several broad tenets that serve as guides for the use of an irregular force: 1) They are best suited to

limited offensive action and are not capable of effective defenses; 2) They must be employed in areas where enemy combat units are absent or dispersed; and 3) The essence of all their activities must stress indirect, over direct action against the enemy. Regardless of the situation that exists in a conventional theater between the enemy, the conventional force, and the irregular force, these concepts will form the basis for the employment of the irregular force.¹¹

Applying the Irregular Force in the Conventional Theater

The unique nature of the irregular force makes it ideally suited for specific types of tactical operations and functions. These operations and functions in turn suggest a set of cases for the use of the irregular forces in the domain of conventional force operations at the operational level. Historically irregular forces have been used for four broad types of tactical missions: intelligence, security operations, raiding, and deep or flank operations in conjunction with conventional forces.¹²

The performance of intelligence gathering is probably the mission that irregular forces are best suited for, and the one that is accomplished at the least risk and cost to the force. Due to the irregular force's ability to move freely in the area of operations, its knowledge of the area where it operates, and its contacts within the local population, it is ideally equipped to accomplish basic intelligence tasks. There are some drawbacks in terms of timeliness and accuracy of the

intelligence that is collected; however, these drawbacks can usually be overcome by a minimal application of conventional force assets to provide a command and control capability to assist the irregular force.

Another tactical mission that irregular forces are often used for is security operations. Those actions undertaken by an irregular force to protect an area, or to defend a specific resource or a piece of terrain fall into this category. Security operations are defensive in nature, and constitute the type of combat operation that puts the force at the greatest risk. When the irregular force adopts security operations it generally does so to protect their community or families from an external threat, or when they are coerced or convinced to do so by short sighted external leadership. Although the irregular force may have a strong motivation to defend, it is generally at a distinct disadvantage when opposed by a conventional enemy. The initiative and freedom of action that the irregular force typically enjoys is lost, and its opponent gains the advantage.

A more typical, and suitable operation for the irregular force is raiding directed against targets of opportunity. In this type of operation the irregular force, relying on its intelligence advantage and stealth, avoids enemy strength by striking lightly defended targets that can be destroyed with a high degree of certainty. Mobility, unpredictability, and the other inherent advantages of the irregular force combine to make this the type of operation that irregular units can execute with minimum risk and the greatest return. Support required for this type of operation is moderate, but without an internal or external source to provide

central direction and control, the efforts of the irregular force will be uncoordinated and have decreased effect.

A fourth type of mission occurs when any of the preceding operations are conducted in conjunction with a regular force operating in a rear or flank area. In this instance, the irregular force is utilized to support the tactical activity of the regular force by providing intelligence, security, or conducting raids that form an essential part of the conventional operation as whole. Although this type of operation may promise great benefits for the regular force, it generally requires the irregular force to conduct coordinated operations on a fixed timetable. The irregular force may have a difficult time accomplishing this, or may be exposed to excessive risks as it attempts to fit into a conventional force's operation. As coordination requirements with the regular force increase there is a corresponding increase in the assistance that the irregular force requires. Also, as the proximity of regular and irregular forces increases the risk of fratricide increases.

These four types of missions set the stage for the three general cases in which irregular forces can be integrated into a conventional theater. These cases are: 1) filling battlefield voids, 2) augmentation of conventional forces, and 3) the provision of additional combat forces. The cases describe what the irregular force can accomplish with respect to the conventional force's disposition, the coordination of battle activities, and the structure of the battlefield.

The first case for the employment of the irregular force is in the battlefield voids, the areas where conventional forces are not. The irregular force, operating

in rear, flank, or future lodgment areas, can conduct operations to destroy critical installations, disrupt lines of communications, create confusion, draw enemy forces away from the conventional force, gather intelligence, or deceive the enemy. In this case the irregular force operates independently of the conventional force. The irregular force's actions are coordinated in a general sense so that detailed timing of operations is not necessary, support requirements are minimized, and the types and locations of irregular operations can be broadly defined. The irregular force's action contributes to the overall operation, but in a very loose and indirect manner.

The second case is the augmentation of the conventional force's activities. In this instance the irregular force's operations are conducted in a manner that is designed to complement the conventional force's activity. Coordination and timing become more critical, and support requirements increase as a result. The irregular units operate in conjunction with the conventional forces in rear or flank areas. Irregular force actions can be coordinated to support the close fight, to perform security operations in the friendly rear area, or to assist in the early stages of forced entry operations. The irregular force does not necessarily operate in close proximity to the conventional force; however, the activities of both forces are coordinated to have a relatively immediate synergistic effect.

The provision of additional combat forces is the third case of irregular-conventional force integration. In this situation the irregular forces are likely to operate in close proximity to the conventional forces, and close coordination is required to ensure the efforts of both are synchronized. Support

requirements are maximized as irregulars are employed to strike specific points in the close or deep areas in conjunction with regular forces, or to participate in the exploitation or pursuit of a routed enemy.

These three cases represent the ways that irregular forces can be integrated into a conventional force's operation. What they fail to address is the nature of the limitations that are imposed when the irregular force is being utilized as an economy of force measure by the conventional force.

Economy of Force in the Irregular-Conventional Theater

Economy of force, as a principle of war, dictates that the minimum *essential combat power* be allocated to secondary efforts.¹³ In broad terms it drives the commander to accept risks where his interests are not vital, and when resources are constrained. He must seek to apply the minimum amount of resources in economy of force areas in order to achieve superiority in the area where a decision is sought. Economy of force is often described as the reciprocal component of the principle of mass.¹⁴ Although this definition adequately describes economy of force in terms of conventional forces, it warrants expansion when irregular forces are considered as an economy of force measure in conjunction with conventional forces.

When irregular forces are applied in these circumstances there are several ideas that are connoted by the standard definition of economy of force. Irregular

forces, because of their inherent qualities and limitations in employment require judicious use.¹⁵ Irregular forces cannot be considered in conventional terms when applied as an economy of force measure. Irregular units need to be applied with finesse, and treated as a viable, but fragile resource. They constitute a force that is extraordinarily subject to wastage both in the sense that they can be under utilized, and in the sense that they can be mis-utilized. Irregular units are easily discounted as a potential combat force because of their often small size and difficulties in control and management. As a result, the irregular force is often ignored, or given a role that fails to fully exploit its potential. Conversely, this type of force can be easily misutilized when adequate measures are not taken to account for its limitations and the often transient nature of its impact in the theater. Irregular forces, if used for purposes they are not suited to, will often fail, even if the mission appears relatively simple from the conventional perspective.

In order to grasp the benefits that can be derived from the irregular force it must be viewed as a part of the whole force rather than in the narrow context of a separate, irregular element. In this way the irregular force can be properly integrated into the conventional warfare setting. Potentially the irregular force, if properly blended into the force as a whole, can have an impact that is greater than the sum of its separate parts. In an economy of force role, rather than acting as the reciprocal of mass, the irregular force can have the effect of multiplying mass at the point of decision.

The application of the irregular force must take a long term view of its utility. If applied as an economy of force measure the irregular force's potential cost to the entire operation must be thought through to determine if there will be consequences that exceed the value of its use. Many of the risks associated with irregular forces revolve around their political aspirations. In the near term, the application of an irregular unit in an economy of force role may appear very attractive to an operational planner. However, the long term consequences of applying it may include continued conflict between the irregular force, and other political, ethnic, or social groups in the area of operations. To plan for its use without considering the long term results of their political desires is often the first step in setting the conditions for continued conflict after initial success.

The British experience with the Arab irregulars during World War I is one example of how a short term view of the usefulness of an irregular force can have unforeseen long term consequences. The Arabs exceeded all expectations in terms of economy of force, and their contribution to the success of the campaign in 1918 is not disputed.¹⁶ But at the same time the operational commander was using the Arab irregulars to achieve his military end state, diplomatic agreements were made that ultimately led to the cause of the continuing problems in the Middle East.¹⁷

III. The British Campaign in Palestine and the Hejaz Desert, 1916-1918

The British campaign in Palestine and the Hejaz that was conducted from 1916 to 1918 during World War I provides an excellent example of the use of irregular forces as an economy of force measure in an integrated conventional theater. Large Arab irregular forces were employed throughout the depth of the area of operations to accomplish the theater objectives. The campaign is useful example because it highlights almost all of the important elements of an irregular warfare based economy of force action in a conventional theater, and the campaign demonstrates both positive and negative aspects of a conventional force's integration of an irregular force in a theater setting.

To set the stage for the campaign, the area of operations, the operational setting, and the operational actors will be introduced, followed by a description of the campaign that focuses on the critical elements of an integrated conventional-irregular theater.

Theater Overview

The area of operations consisted of that portion of Palestine bordered by the Mediterranean Sea in the west, extending north to the city of Aleppo in Syria, and south to the Suez Canal. (figure 1) The southern boundary of the area included all of the Red Sea to a line through the city of Mecca on the Arabian

Peninsula. From Mecca the boundary went northwest to Ma'an and north back to Aleppo. The area of operations included all of the Sinai and Hejaz Deserts, and the present nations of Israel, Syria, Jordan, western Saudi Arabia and Iraq, and southern Turkey.¹⁸

The southern portion of the area is an arid desert region that has scattered mountain plateaus and extensive wadi systems. Progressing north from the Sinai the terrain becomes hilly with a mountainous plateau dominating the center of the area. Water is available from the Jordan River and its tributaries, but the remainder of the area is arid with the only fresh water coming from scattered oases. There is a narrow coastal plain along the Mediterranean. Winters are moderate with occasional snowfall in the mountains, summers are hot and dry.

Lines of communication consisted principally of a single track rail system that ran from Aleppo south through Der'a, Ma'an, and then southeast to Medina. This rail line has a major spur that originates in Der'a and goes east, and then south and southeast through Jerusalem and Gaza. A British double track line extended across the Sinai from the canal to the outskirts of Gaza.

The British units of the Egyptian Expeditionary Force (EEF) were commanded by General A.J. Murray through the summer of 1917, and then by Field Marshal E. Allenby until the end of the war. Arab forces were lead by Hussein, the Sherif of Mecca, and his eldest son, Feisal. An EEF advisory force operated with the Arabs prior to the beginning of the Arab revolt against the Turks which began in June, 1916. This effort was principally directed by T.E. Lawrence

beginning in September, 1916. The Turkish forces were under the nominal command of German Field Marshal Liman von Sanders.

The British theater objective until the summer of 1917 was the defense of the approaches to the Suez Canal from the Turks. After the summer of 1917 it was to defeat and eject the Turkish forces from the entire theater. The Turks were attempting to retain the southern fringe of the old Ottoman Empire by defending on a line from Gaza, through Beersheba, to Aqaba and then along the Red Sea coast as far south as Mecca. At the beginning of the Arab Revolt the EEF was occupying defensive positions opposite the Turks on the Gaza-Beersheba line.

The Campaign

Colonel T.E. Lawrence's exploitation of the Arab revolt against the Turkish empire during World War I is a significant example of the integration of conventional and irregular forces at the operational level of war. Significance is the critical word in the evaluation of this type of operation. It must be assessed in terms of how it contributed to the success of the operation as a whole and it should be examined in terms of what the costs and benefits were in relation to both the irregular force and the conventional force. Casualty figures, money spent, arms supplied and forces required to support an economy of force effort must be weighed against the advantage that is gained in terms of forces, terrain, and tactical position.

Revisionist historians, such as Mack, Musa and Aldington, have a general tone of disrespect for Lawrence and the Arab effort in World War I.¹⁹ However, if the operation is examined in the terms described above the overall impact of the Arab revolt and Lawrence's role in the uprising take on an unusual significance from the integrated irregular-conventional perspective. The evaluation of Lawrence's actions can be approached by examining the major phases of the allied campaign in the Egypt-Palestine theater and by assessing the costs, benefits and effects of the Arab contribution to them.

From the perspective of Lawrence and the Arab forces the campaign can be divided into three phases. The first phase covers the period from the beginning of the Arab revolt, June, 1916 through the first and second battles of Gaza in April, 1917 and up to the capture of Aqaba in July, 1917. This phase can broadly be described in terms of an economy of force mission as the isolation of the Turkish forces in the Hejaz Desert. The next phase includes the period prior to the Third Battle of Gaza and up to the fall of Jerusalem in December, 1917. During this phase the Arab forces fixed the Turkish left flank and maintained the isolation of their forces in the Hejaz. The third phase covers from January, 1918 through the capture of Damascus in October, 1918. During this period Lawrence and the Arabs continued to fix the forces on the left flank and in the Hejaz while they interdicted a critical resource base in the rear area and supported Allied attacks by direct action against the lines of communication in the Turkish Expeditionary Force's (TEF) rear.

**Operations in the Hejaz Desert--Fixing a Superior Force
June, 1916 to July, 1917**

During the first phase of Lawrence's operations with the Arab forces there was no clear cut guidance in terms of what the Egyptian Expeditionary Force (EEF) commander, General Murray, expected from the Arabs. This was due in large part to the uncertainty that existed as to the Arab capabilities and reliability. The Arabs were essentially a tribal society that was nominally controlled by Hussein, the Sherif of Mecca and his three sons Feisal, Ali and Abdullah. Because of this General Murray did not have any great expectations of them in terms of an economy of force effort to complement his conventional operations. It was apparent that the best that Murray expected was an Arab nuisance threat to the Turkish Hejaz Expeditionary Force (HEF) to complement his ongoing operations against Gaza, which was far to the north.²⁰ Accordingly, Murray only committed a small percentage of his effort in support of the Arabs.

The Allied augmentation to the Arabs consisted of a twenty to eighty man detachment of advisors (of which Lawrence was a member) and a battalion of native Egyptian troops.²¹ These forces were supplied and supported by the British Red Sea Patrol which consisted of between five and fifteen light war ships and supply vessels.²² Additionally, arms, ammunition and money were provided to equip and sustain a force of eight to ten thousand Arabs. In order to maintain the Arab allegiance they were paid at the rate of two Pounds (gold) per man per month.²³

The Arab forces and their advisors faced a substantial threat in the form of the HEF and its 21,300 soldiers. (figures 2A and 2B) The HEF had the mission of occupying and maintaining the southern fringe of the Turkish empire including the religiously significant cities of Mecca and Medina. The Arabs detested this occupation and considered the Turks usurpers of their rights as the defenders of the holy cities per the Islamic tradition. This was the basis for the Arab revolt and Hussein and his family were the logical leaders based on their hereditary charge as the defenders of Mecca. The HEF, in order to control the Arabs, positioned themselves throughout the Hejaz at the ports along the Red Sea from Aqaba in the north to Jiddah in the south, and along the Hejaz Railroad from Ma'an to Medina. The Hejaz Railroad was vital to the Turks because it represented their only line of communication to their base of supply in northern Palestine.

It is critical to note that the HEF was a large but excessively extended force that was susceptible to irregular warfare. The HEF had dispersed its 21,300 soldiers in small detachments over the length of the Hejaz Railroad, and in larger elements in the towns and depots on the route and along the coast of the Red Sea. Their susceptibility to irregular warfare was demonstrated in July, 1916 when the Arabs began their uprising. During the twelve months that followed the Arab forces numbering between 900 and 17,500 men forced the surrender of all the Turkish bases on the Red Sea and the city of Mecca. Additionally, they raided the railroad north of Medina with enough frequency to force the Turks into a

defensive mode of guarding their line of communication and their garrison of Medina at the end of it. (figure 2C)

The cost that the Turks paid during this period was approximately 5000 casualties and prisoners of war, the loss of their supplies in all of the seaports, and the siege of Medina, which was now barely supplied by the Hejaz Railroad.²⁴ The Arabs on the other hand had lost less than two hundred men and had secured a forward operating and supply base at Aqaba for future operations. At the same time the allied advisors had sustained no casualties, and the EEF as a whole had reaped the benefits of having more than half the Turkish forces in the theater tied up in a region that was far from their main effort.

The EEF's main effort during this period was directed at forcing the TEF across the northern edge of the Sinai Desert towards Gaza while they constructed an extensive water and rail supply system behind them. The front extended south from the Mediterranean Sea for about fifty miles and ended with an exposed right flank in the Sinai Desert. The 39,000 soldiers of the EEF were opposed by the 28,000 soldiers of the Fourth and Eighth Armies of the TEF. Although the Allied operation during this period ended in the failures of the First and Second Battles of Gaza, the EEF was able to complete their logistical and defensive preparations that enabled them to maintain their hold in southern Palestine as a jumping off point for future operations.

The net effect of the Arab operations under Lawrence had more than the desired effect. The Arabs had successfully tied down the bulk of the Turkish

forces in the southeastern portion of the theater, and denied the TEF the opportunity to reposition forces to the north to reinforce at Gaza. The Turks were now in a position where they were forced to maintain an undefendable line of communication to Medina and waste the best of their Anatolian infantry in the process of trying to do so.²⁵ The Arabs had also retaken the holiest city of Islam which had the indirect effects of causing mass desertions of ethnic Arabs from the Turkish army and securing the confidence of the hundreds of thousands of British colonial soldiers who were Islamic.²⁶

The final significant effect of the first year of the Arab revolt was the seizure of the port city of Aqaba. This was to become the crucial link in future operations as the base of operations for the Arabs in their activities against the left flank of the Turkish army.

Securing Allenby's Right Flank-Attacking the Turk's Left Flank July to December, 1917

During the second phase of Lawrence's campaign with the Arabs the EEF received a new commander, General Allenby. Allenby recognized the significance of Lawrence's force and their location at Aqaba. (figure 3) Lawrence was only one hundred miles from his exposed left flank and ideally situated to interdict and harass the Turkish left flank and its line of communication, while the southern portion of the Arab force continued the siege of Medina.²⁷ Allenby saw the potential of the Arabs as a force that could simultaneously hold the 18,000 soldiers of the HEF in place in the vicinity of Medina while attacking the Turk Fourth

Army's line of communication. (figures 4A and 4B) The entire left flank of the Turks would be engaged in protecting their rear while he directed his main effort at breaking through the Turk's Seventh and Eighth Armies along the Gaza-Beersheba line.

Lawrence and the hundred allied advisors that now worked with him implemented Allenby's guidance by using the 5,000 to 6,000 Arab irregulars under Ali and Abdullah in the southern Hejaz to continue their raids directed at interdicting the railway north of Medina. The rule was to "keep them alive, but barely alive."²⁸ Lawrence, then led the 2,500 man northern Arab force under Feisal in a series of raids from July through October of 1917 that intermittently cut the Hejaz Railway just south of the 6,000 man garrison at Ma'an. Additionally, in October the Arabs attacked the towns of Shaubak and Petra that were located on the southern edge of the Palestine grain belt, a major source of supply for the Turks, and a concern for the Fourth Army.

At the end of October and the beginning of November, 1917 Lawrence launched a series of three raids that were synchronized to support Allenby's attack on the Gaza-Beersheba line which was to begin on October 31st. These raids were intended to turn the Fourth and Eighth Armies attention to their rear while Allenby mounted his main effort at Beersheba. The raid on Hebron in Eighth army's rear was a disaster and the entire Arab force of eighty men was killed or captured. The other two raids conducted in the Yarmuk Valley against the railway lines in the Fourth and Eighth army's rear were only partially successful. (figure 4C)

In spite of these set backs the overall cost in terms of losses of personnel still heavily favored the British and Arab forces. They had lost approximately one hundred and fifty personnel and one British advisor, while the Turks had lost eight hundred to one thousand men.

At the end of this phase Allenby's 98,000 man EEF attacked the 74,500 man TEF and successfully turned their flank at Beersheba, seized Gaza, and exploited the attack until Jerusalem was captured on December 9th. Total EEF casualties were 11,000 to the TEF's 40,000.

The attack on the Gaza-Beersheba line was the turning point in the war and the Arabs had played an important role. Their raids in the northern and southern Hejaz, and in the grain belt area of Palestine had tied down two Turkish armies, and effectively stopped them from having any influence on the critical battles that were being fought in western Palestine. The same actions had the unintended effect of causing the rank and file of the Turkish army to fear the use of the railroad; and in fact it caused a strike by the railway workers who had come to fear for their lives on every ride. As the raids began in northern Palestine the Turkish leadership was forced to turn its attention to the rear at the critical moment during Allenby's attack and it provided an essential distraction at the moment of decision.

By the end of the period the successes of Lawrence and the Arabs had become widely known to the northern Arab tribes that lived in the regions to the west of the Fourth Army and as far north as Damascus. They were eventually to

rally to Feisal as a result and would have a significant impact during the final phase of the Arab operations.

Holding a Flank and Threatening the Rear January to October, 1918

The last phase of the Arab operation was quantitatively and qualitatively the most significant example of integrated irregular-conventional action of the entire campaign. Allenby's guidance to Lawrence during this period was to encourage the spread of the Arab revolt as far north as possible, with Damascus and Aleppo being the ultimate objectives. He also wanted the Arabs to maintain the pressure on the HEF and the Fourth Army's lines of communication while they continued to interdict the grain and wood supplies in the area north of Ma'an. Allenby also directed Lawrence to assist in his deception plan by making the Turks believe that the next Allied main effort would be directed against Amman. Finally, Lawrence was directed to sever all the lines of communication in and out of Der'a just prior to Allenby's final push toward Damascus. (figures 5A and 5B) All of these missions were critical elements in the plan for the final defeat of the Turks and are indicative of the significance that Lawrence and the Arabs had in the larger operational scheme.

As Lawrence translated this guidance into action he met with unprecedented success. The siege of the HEF continued until the end of the war when the remaining 12,000 Turks surrendered to Ali and Abdullah at Medina. In the north the 3,000 man Arab force under Feisal destroyed the Fourth Army's grain

and timber stores in January and February and then they completely cut off the HEF in May by destroying eighty miles of railroad track south of Ma'an. At the same time they began a siege of the 6,000 man garrison at Ma'an and they destroyed twenty-seven bridges on the rail line north of the city. (figure 5C)

In August, Lawrence and Feisal moved north to Azraq with a 6,000 man Arab force and two hundred allied regular troops (with armored cars and several aircraft) to stage for the operations in direct support of Allenby's upcoming attack. From here they were able to threaten the Turkish garrison at Amman and their activities reinforced the belief that the main Allied effort would be oriented to the east, while in fact Allenby was preparing to attack to the North.

The Arabs made their final critical contribution during the period from 14 to 17 September by cutting all the rail lines around the critical railroad junction at Der'a. This effectively eliminated any chance that the Turks had for rapidly repositioning forces or withdrawing as Allenby made his attack on September 19th. On the 23d the Arabs moved south to cut the rail lines north of Amman to stop the Fourth Army's attempt to escape from the Allied supporting attack. This hastened the end of the beleaguered Fourth Army.

Feisal's and Allenby's goal of complete Arab revolt was realized on October 1st when the allies entered Damascus. The remains of the TEF and the balance of the Turkish forces as far north as Aleppo came under a continuous uncoordinated attack from the Arab population. From this point until the end of the war the value of the Arabs as an effective irregular force declined substantially.

The value of Lawrence's efforts with the Arabs lay principally in their usefulness to the EEF's main effort. For nearly two and one half years the allied input to the Arabs in terms of men, materiel and money was minuscule when compared to that of the rest of the force. The casualties that the Arabs inflicted on the Turks vastly exceeded their own, and more importantly, the size of the enemy force that the Arabs fixed had a decisive impact on the conduct and success of the overall EEF campaign. In essence, the Allied commanders had the freedom of action to ignore their vulnerable right flank and the Turkish force that could have threatened that flank because of the economy of force effort that was fought by Lawrence and the Arabs.

The most telling commentary on the impact that the Arab forces had on the Turks comes from the senior German advisor to the Turkish army, Field Marshal Liman von Sanders. In the final chapter of his war record he wrote: "We no longer could have stopped the progress of the Arab insurrection in the rear of our army....The lack of sufficient troops to establish rearward positions of support was fraught with danger...it was the cause of the collapse of the front."²⁹ From Allenby's point of view the only reliable mention of the Arab impact on the entire campaign comes from a letter he wrote to his wife two days after Damascus fell. In it he credits his success to his three corps commanders, to Lawrence, Feisal and the Arab force.³⁰

IV. The Operational Perspective

The success of the EEF and Arab coalition in the fall of 1918 stemmed in part from the complementary actions of the two forces operating in a synchronized manner. The EEF, as the conventional force, fought and defeated the German supported Turk Army throughout the length of western and central Palestine. On the other hand, the Arab irregular force fixed the Turk operational left flank and rear in eastern Palestine and the Hejaz, and aided in the defeat of the TEF. Over the course of the campaign the actions of the irregular force increased in importance as Allenby and Lawrence improved their ability to integrate the actions of both forces toward the same ends. This was partly due to Lawrence's increasing comprehension of the complexities of dealing with the Arabs, and to Allenby's realistic grasp of the potential that lay in the Arab forces as a part of his command.

In order to understand the integrated nature of the relationship between the two different types of forces in this campaign it is necessary to view them from the perspective of operational art that uses both the standard operational terms, but also keeps in mind the unique characteristics of the irregular force. The interaction between the centers of gravity, decisive points, lines of operation, and culminating points of the Arab irregular force, the EEF, and the Turk Army form the basis for an analysis of this campaign. Additionally, the allocation of resources and the sequencing of events within the theater are critical to understanding how the irregular force was integrated into the conventional force's operation.³¹

The Arabs' center of gravity lay in their unassailable base. In the campaign in Palestine the Arabs' physical base was in their inaccessible tribal areas, at the ports on the Red Sea and at Aqaba, and finally at Azraq in eastern Palestine. These were never effectively threatened by the Turks. The physical base was too remote, and too dispersed for the Turks to effectively attack it. In a psychological sense, the Arab's base centered on tribal bonds, and loyalty to Feisal and Hussein. Although this aspect of the base was difficult to maintain, the Turks never succeeded in breaking the resolve of the Arab force. Both the physical and psychological parts of the Arabs' base combined to make it truly unassailable. From the perspective of the EEF, the center of gravity was the British line of communication across the Sinai and into central Palestine. The Suez-Gaza railroad provided the force with the military supplies and water which allowed them to fight at a significant distance from their base of supply in Egypt. The only realistic threats to the line of communication were the EEF's exposed right flank, and from the possibility of the Turks massing enough force along the Gaza-Beersheeba line to conduct an offensive. The Turks' center of gravity lay in their ability to use rail transport to rapidly reposition forces in the theater. The Damascus-Gaza railroad and the Hejaz Railroad allowed the Turks to move their forces throughout the theater, and to mass them when, and where they chose to.

In terms of an assessment, it appears that the Arabs had a secure center of gravity. The greatest threat to the Arab force came from dissension within their own ranks, rather than from the TEF. Lawrence and Feisal were forced to

overcome this dissension on an almost daily basis in order to hold the Arab force together, but they were successful. At the same time, the TEF and HEF center of gravity was readily attacked by the Arab force, but in a manner that was consistent with the Arab's limited capabilities as a raiding force. The EEF on the other hand was forced to adopt the more direct approach of fighting the TEF's front-line forces in order to get into a position where they could affect the rail lines in the Turk rear. Allenby's and Lawrence's approach to integrating the capabilities of both the conventional and irregular forces to attack the TEF's center of gravity ultimately capitalized on both of the forces strengths while minimizing their weaknesses.

In a theater where an irregular force is relied on as an economy of force asset, the center of gravity of the irregular force must have the same degree of security that the regular force's center of gravity is afforded in order to remain effective. This protection may naturally exist for the reasons previously discussed or it may require augmentation to ensure its security. The nature of the irregular force's base tends to make it a distinct entity, separate from the conventional force's center of gravity. However, the degree of interrelatedness between the two could increase if a heavy reliance is placed on the irregular force to accomplish critical portions of the operational mission. It is unlikely that the irregular force will be able to attack the enemy center of gravity directly, but they may make a contribution to its indirect attack if prudently employed. The irregular force can be used to influence the enemy center of gravity in the sense that they can have an

effect within the time and space limits that the operational commander defines.

The irregular force's impact has to be viewed as transient rather than a long term effect.

Decisive points can lead to the enemy's center of gravity.³² A line of communication, a critical control node, or the position of reserves may lie in areas where the irregular force may make the greatest contribution to the theater effort. The points that are critical to the enemy, and are weakly defended because they are deep in his rear area may become prime objectives for the irregular force operating in support of the conventional force. In the Palestine campaign the decisive points were initially the strong Turk positions at Gaza, Beersheba, and Medina, then along the rail lines at Ma'an and Junction Station, and finally at Der'a. The Arabs were able to make a significant contribution at each of these by attacking the decisive points indirectly and at a time and place that provided the greatest benefit to the EEF. The attacks against the Hejaz Railroad tied down the HEF at Medina while Allenby attacked at Beersheba and Gaza. The Arabs' subsequent attacks in the vicinity of Ma'an and Der'a had the same effect on the Fourth Army and freed the EEF to focus on the Turk right flank. The irregular force was utilized in each case in the indirect attack of a decisive point, while the conventional forces were used to penetrate the TEF forward defenses and exploit into the rear.

The lines of operation for the conventional forces were well defined. The EEF operated on the axis, Suez-Gaza/Beersheba-Jerusalem-Haifa/Damascus, while the Turks operated on the line Damascus-Gaza/Beersheba and Damascus-Medina.

The Arab line of operations had objectives located in the vicinity of the decisive points previously discussed, but no clearly defined line of operations in the conventional sense of the term. From the TEF perspective, the Arabs seemed to appear, attack, and then vanish. The attacks were too random and their base too well concealed to form a recognizable line of operations. The lines of operations of the EEF and the Arabs complemented each other by allowing the EEF to stay focused on the portion of the theater where the decision was being sought, while the Turk's line of operations was diverging into both the Hejaz and the Sinai.

The line of operation for the irregular force should be an intentionally ill defined one. A line of operation may exist with respect to the irregular force's base, but even this should have a random element to it that caters to the covert nature of the irregular operation. *Ideally, the irregular should appear to attack everywhere, but exist nowhere.* They could be compared to a gas cloud that covers the enemy, condensing at opportune moments and at opportune points to strike, and then immediately dissipating. Their actions must work in concert with the conventional force's line of operations, but the maximum effort has to be made to make the action appear uncoordinated.

The irregular, of all the forces operating in the theater, may be the force most or the least vulnerable to culmination. With a secure base and judicious employment the irregular force can be extremely resistant to culmination. On the other hand, an irregular unit that has its base attacked, is subjected to effective psychological warfare, or that is utilized in operations that place the unit at high

risk, may rapidly culminate. The durability of the irregular force and its ability to resist culmination are critical factors in planning its use. The Arabs were able to resist culmination through the dedicated efforts of Lawrence and Feisal, and through their prudent application by Allenby. At the same time they were able to assist the EEF in resisting the forces of culmination by constantly having an effect on the Turk's left flank. The Arabs' continuous attacks along the Hejaz railway and the subsequent actions in the rear of the Fourth Army aided in minimizing the pressure the TEF could bring to bear on Allenby as he prepared his attacks at Gaza-Beersheeba, and while he prepared to attack north from Jerusalem. While Allenby was afforded the luxury of preparing to attack relatively unmolested, the TEF and the HEF were under continuous pressure from the Arabs, which hastened their culmination process.

As the planners begin the process of sequencing operations and allocating resources in a conventional-irregular theater they must keep the operational limits of the irregular force at the fore front. A firm grasp of their unique capabilities and limitations will lead to realistic missions and resourcing within the scope of the theater plan. In terms of the operational functions the irregular force can contribute almost everywhere as long as it is viewed as an economy of force measure that is operating in support of the conventional force.³³ The irregular force can provide operational intelligence, assist in operational deception and contribute to operational maneuver and protection, but it accomplishes these tasks in a manner that is distinctly different from the conventional forces they operate

with. Allenby's utilization of the Arab forces is a good example of sequencing and properly resourcing an irregular force to enable it to support the theater objectives. He recognized the inherent problems that the Arabs and Lawrence had with precise timing, control of the irregular forces, and the indirect nature of all the irregular's attacks. He compensated for these deficiencies by giving the Arabs windows in which they should conduct operations, and by providing objectives that were within the scope of their capabilities, but still supported his overall concept. Allenby recognized the role that the Arabs could play in supporting his maneuver by protecting his flank, fixing a large enemy force, deceiving the Turks as to his true intentions, and by providing him intelligence.

The operational aspects of the integrated conventional-irregular campaign, when combined with the elements that describe the inherent attributes of the irregular soldier and the irregular force, present a complex problem for the operational commander. The multitude of irregular force constraints and strengths coupled with the problems of operational design present an almost unlimited set of combinations. The commander and planner at the operational level must adopt a methodical approach to analyze the problems of combining irregular and conventional forces in order to avoid the problems, while making the best use of a potentially valuable force.

V. The Conceptual Framework

The problem of combining irregular and conventional forces in the same theater has to be approached in a disciplined manner because of the complexities and interrelated nature of the elements of irregular warfare when overlaid with the process of operational design. In order to build a framework that describes the integration of irregular and conventional forces it is necessary to identify several broad conceptually based categories that blend the elements already discussed into manageable pieces. The conceptual framework consists of six components that consider the various aspects of the integration of both types of forces in the same theater as a unified system rather than separate parts. The six components are designed to describe common threads that can be followed throughout the analysis process. (figure 6)

The first component analyzes the phsysio-geographic aspects of the problem. It looks at the theater as a whole to determine the parameters that will delineate the space available, the geography of the area, the size and types of forces to be employed, and the time-distance factors that govern the movement of forces. The purpose of this part of the conceptual framework is to determine where it will be possible to conduct irregular operations in the conventional force setting. This component accounts for the concept of the secure base, the proximity of both types of forces, and the density of irregular forces relative to the enemy.

Next is the political component. This component is designed to analyze the internal and external political factors that shape both the conventional and irregular force's desired end states. It evaluates the irregular force's internal political system for problems that will affect its efficiency, and evaluates their over arching political agenda to identify long term political goals. The conventional forces' political motives are considered in relation to the irregular force's to determine the degree of correspondence between the two, and to identify potential sources of future conflict in the area of operations. An irregular force that is politically motivated to regain lost territory, or to see through the fall of an existing political regime is essentially seeking a reward for its services. The conventional forces' and the irregular force's concept of the post conflict end state must be coincident, or at least subject to further negotiation and resolution. Although operational planners can make opportunistic and pragmatic decisions in this regard they will invariably lead to long term problems, and will probably not be accepted as morally correct actions. If the decisions that are made as to the political realities of the end state occur outside the theater, then the commander has the obligation to make his objections known, and to make the best of the situation.

The third aspect of the model is the cultural-psychological component. This component is designed to evaluate the motivation and quality of the irregular force. Social and religious traditions, customs, military background, history, and their sources of internal motivation are examined to assist in making an assessment of how reliable and durable the irregular force will be, and how the irregular force

is suited for operations in the conventional force setting. This component also seeks to identify sources of cultural conflict between the irregular force and both the conventional and enemy forces.

Fourth is the moral component. This part of the model looks at how the various forces will wage war, the level of violence that can be anticipated, and the level of duplicity that the conventional force may have to take with regard to the irregular force. The analysis is designed to determine if the methods that the various forces will apply are within the legal and ethical constraints of the conventional force, and if the irregulars will be able to operate effectively within those parameters. The moral component also measures the nature of the means that the conventional force will take to convince the irregular force to act on their behalf.

The fifth aspect of the conceptual model is the economic component. It evaluates the issues of economy of force and economy of effort in the conventional-irregular theater. This component analyzes the relationships between both forces in terms of the mission that the irregular force is given, and the effect that the mission will have on the conventional force as a whole. The goal is to assess the conventional forces' need to create mass at the point of decision, and the irregular forces' capability to provide a viable economy of force effort in an area where a decision is not sought. This component also takes into account the resources required to support the irregular force and the effect that these resources will have on the conventional force. The utilization of the irregular force, the

effect that the force will generate, and the costs of using the force, are all parts of the analysis.

The final issue that is considered is the component of conventional integration. This examines the possible interactions between the conventional and irregular forces in terms of missions, coordination, control, complementary action, timing and sequencing of action, and the concepts of operational design. The goal of this analysis is to develop a realistic and functional relationship between the irregular and conventional force that maximizes capabilities and minimizes limitations. It will assist in developing a rational set of expectations for the irregular force relative to the conventional force and the theater objectives.

As a whole the components of the conceptual model are designed to make the operational commander or planner think about the problems of integrating irregular forces into a conventional theater as an economy of force measure. None of the components are based on precise quantitative data, they are intended to be qualitative in nature so they can be applied in the absence of hard information. The model forces the operational commander or planner to study all the aspects of the problem and to become familiar with the complex issues that arise when these types of forces are combined in a theater to accomplish a common mission.

VI. Conclusion

The purpose of this monograph was to develop a conceptual framework to aid in the analysis of the problem of integrating irregular force operations into a conventional theater as an economy of force measure. The historical example of the campaign in Palestine and the Hejaz serves to highlight the practical application of such a tool, and to also reinforce the importance of understanding the elements that comprise this type of campaign. The study of the concept of integrating conventional and irregular forces in the same theater has surfaced four points that are critical in analyzing any problem that involves irregular and conventional forces working toward the same operational objectives, in the same theater.

The key concept that becomes clear is that knowledge of all aspects of the problem coupled with a balanced and judicious approach to applying the irregular force is essential to achieving success. The elements of the irregular-conventional force interaction contain so many variables and potential pitfalls that it would be imprudent to adopt any other course than to rigorously study all the aspects of the problem and make an informed and balanced decision. The goal should be to maximize the effect of both forces in a complementary manner, while minimizing or eliminating the detractors.

Another critical concept is that the integrated application of both forces is largely a matter of opportunity. You cannot make the irregular force into what it is not. You have to accept them as they come, and make prudent decisions as to

their utilization. To do otherwise becomes either an attempt at turning the irregular force into a conventional force, or an attempt at forcing the irregular into conventional operations that they are not capable of executing. To try to force the issue of integrating both types of forces can only lead to failures in either the near term or in the long term.

In a theater of operations where integrated irregular-conventional operations are envisioned the concepts that govern operational design and the methodology that guides operational planning will continue to apply. However, there is a need to have an enlightened perspective on the problem as conventional and irregular forces are integrated to accomplish the theater mission. The problems that are unique to the irregular force, and their unusual strengths in relation to the conventional force, both point toward a cautious approach to planning that considers all the relevant aspects of operational design with an eye toward maximizing inherent strengths while minimizing the inherent weaknesses.

The decision to integrate regular and irregular operations must be viewed as one of necessity. When the conditions are right, and the forces exist, then fully integrated conventional-irregular operations should be considered. But this option should only be exercised as a final resort. The irregular force usually comes to the fight with more problems than solutions. If they are a necessary part of the theater plan than they should be used, but one should always keep in mind that the short term solution, may sow the seeds of a long term problem.

The Area of Operations, 1916 to 1918

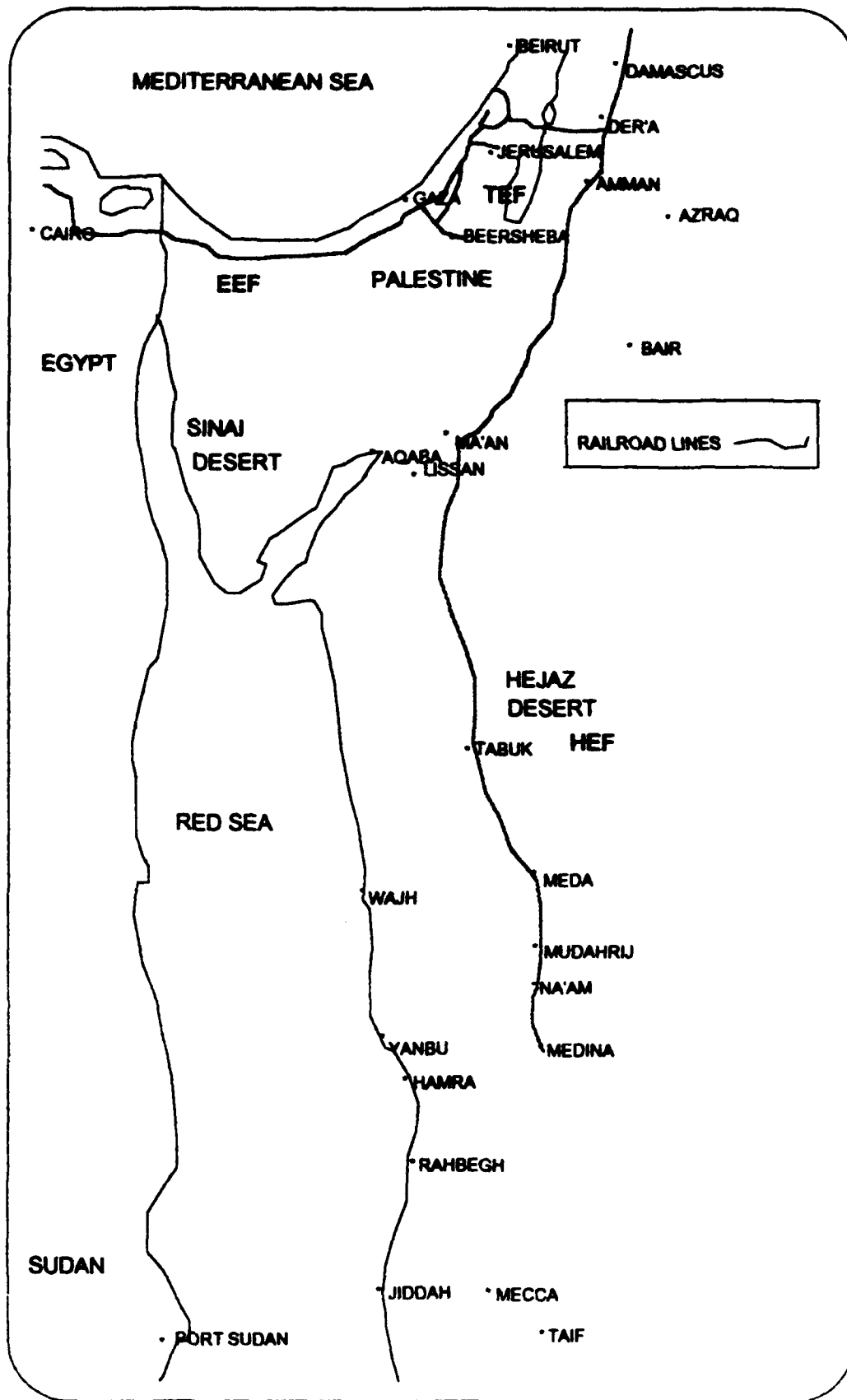


Figure 1

Lines of Communication, June 1916 to July 1917

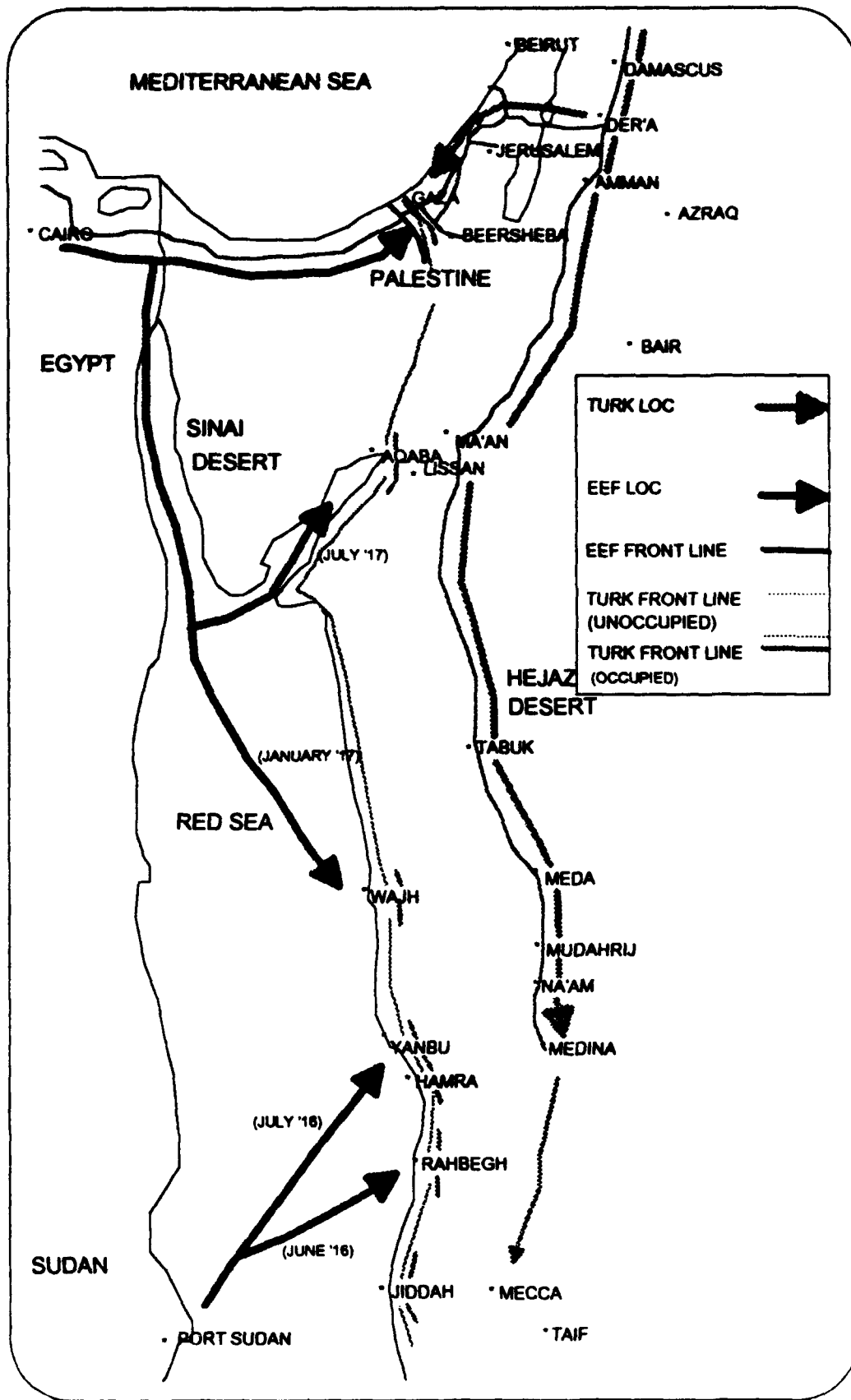


Figure 2A

Disposition of Forces, June 1916 to July 1917

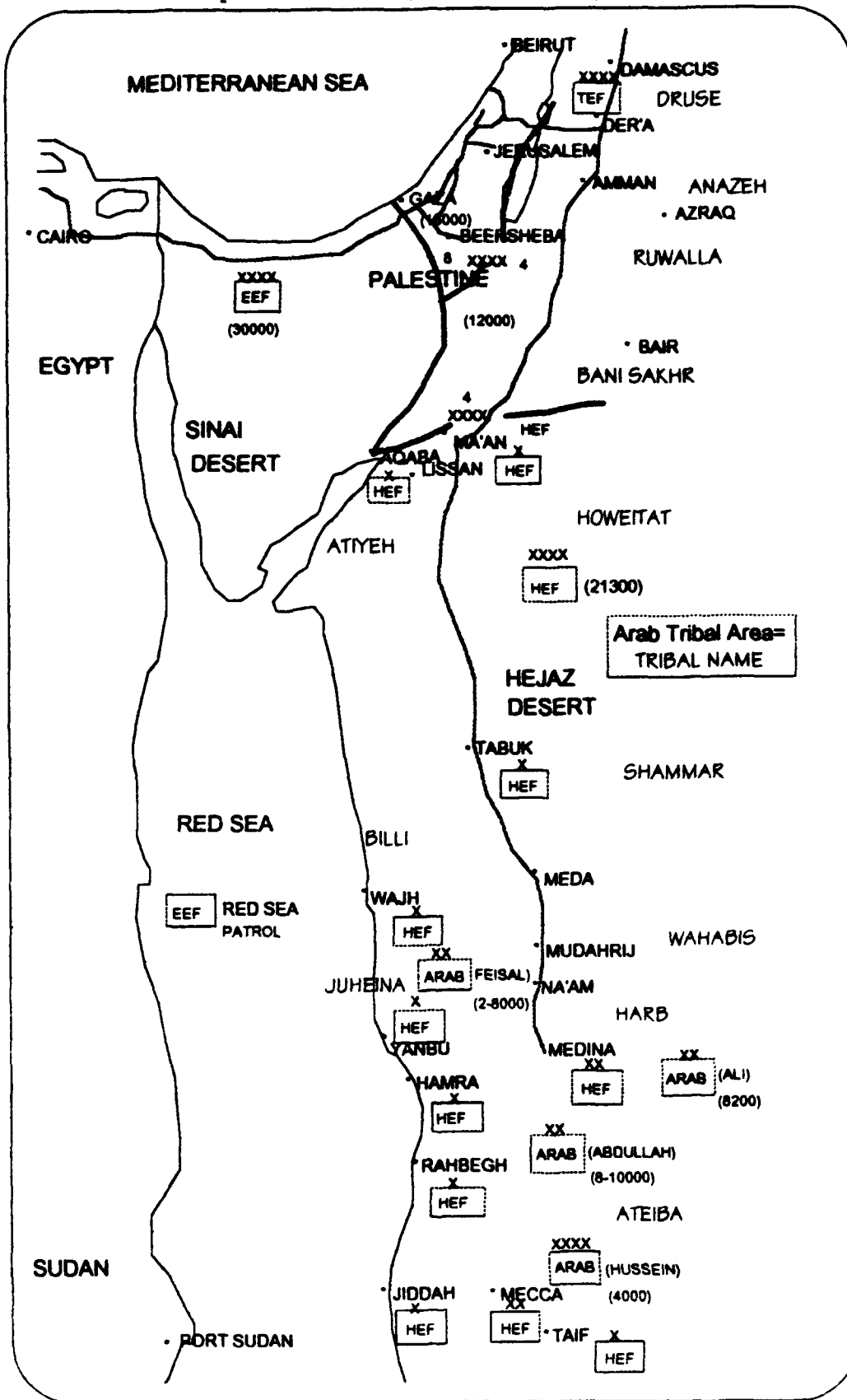


Figure 2B

EEF and Arab Attacks, June 1916 to July 1917

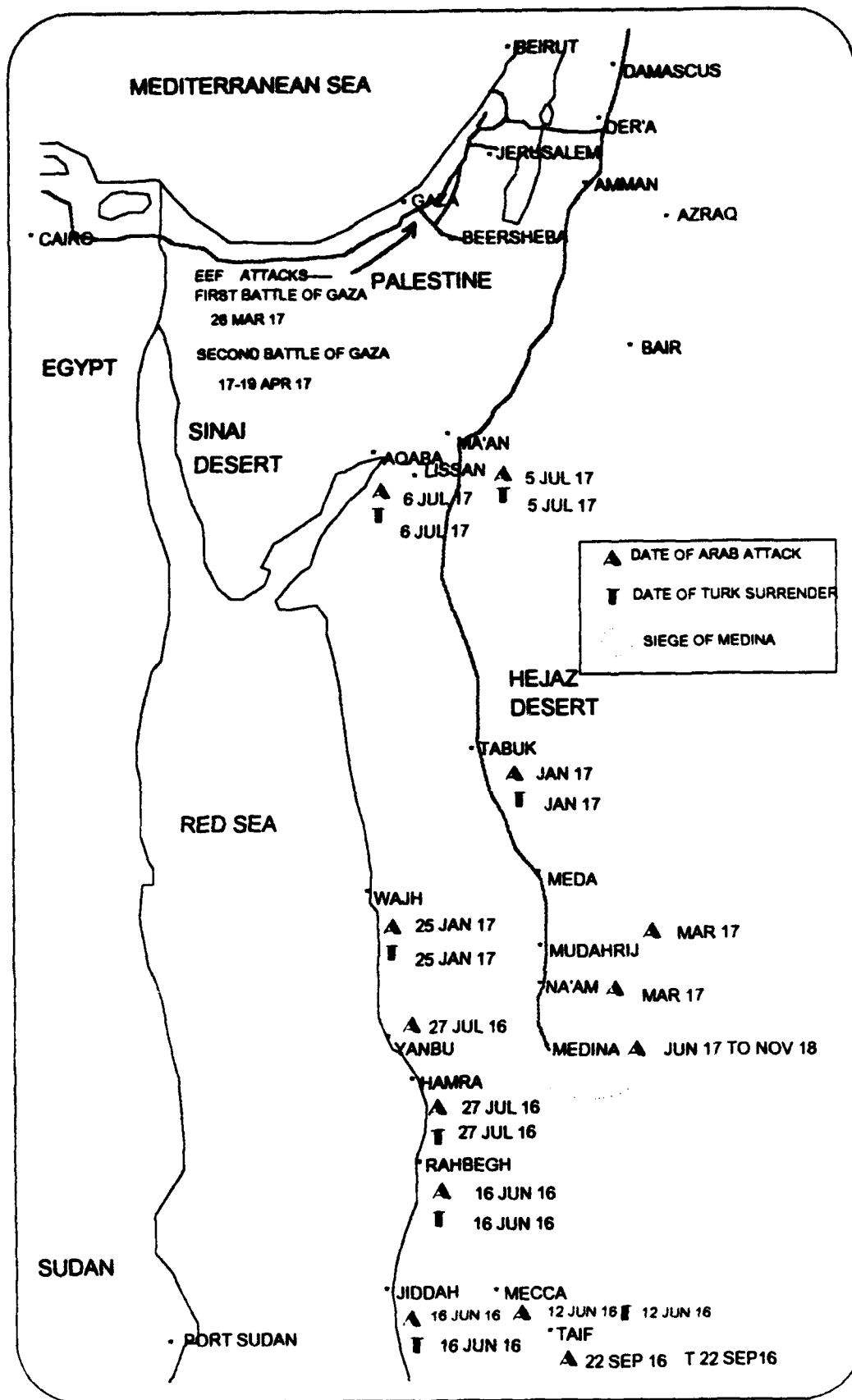


Figure 2C

Lawrence's Proposals for Arab Action in Palestine, July 1917

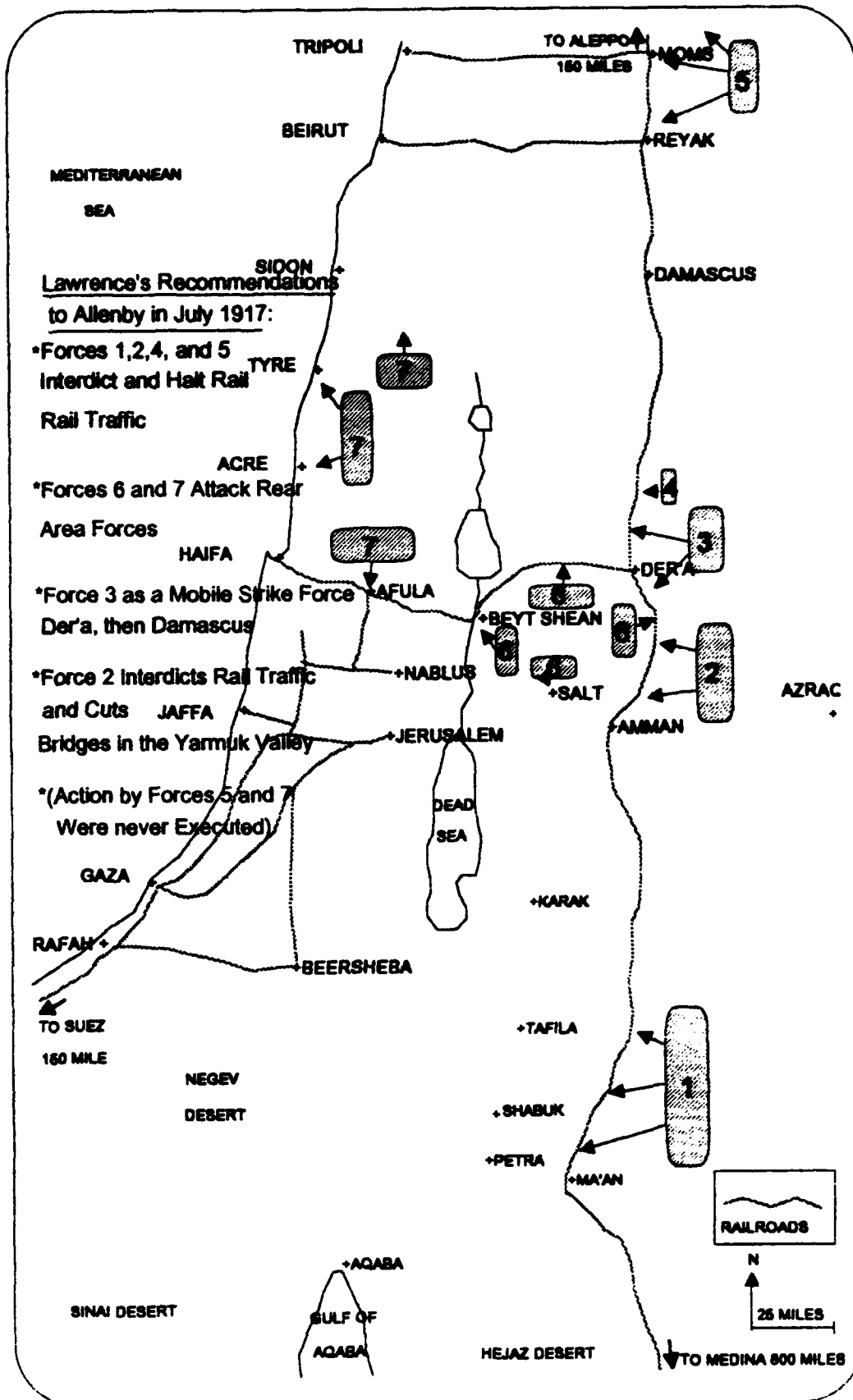


Figure 3

Lines of Communication, July 1917 to December 1917

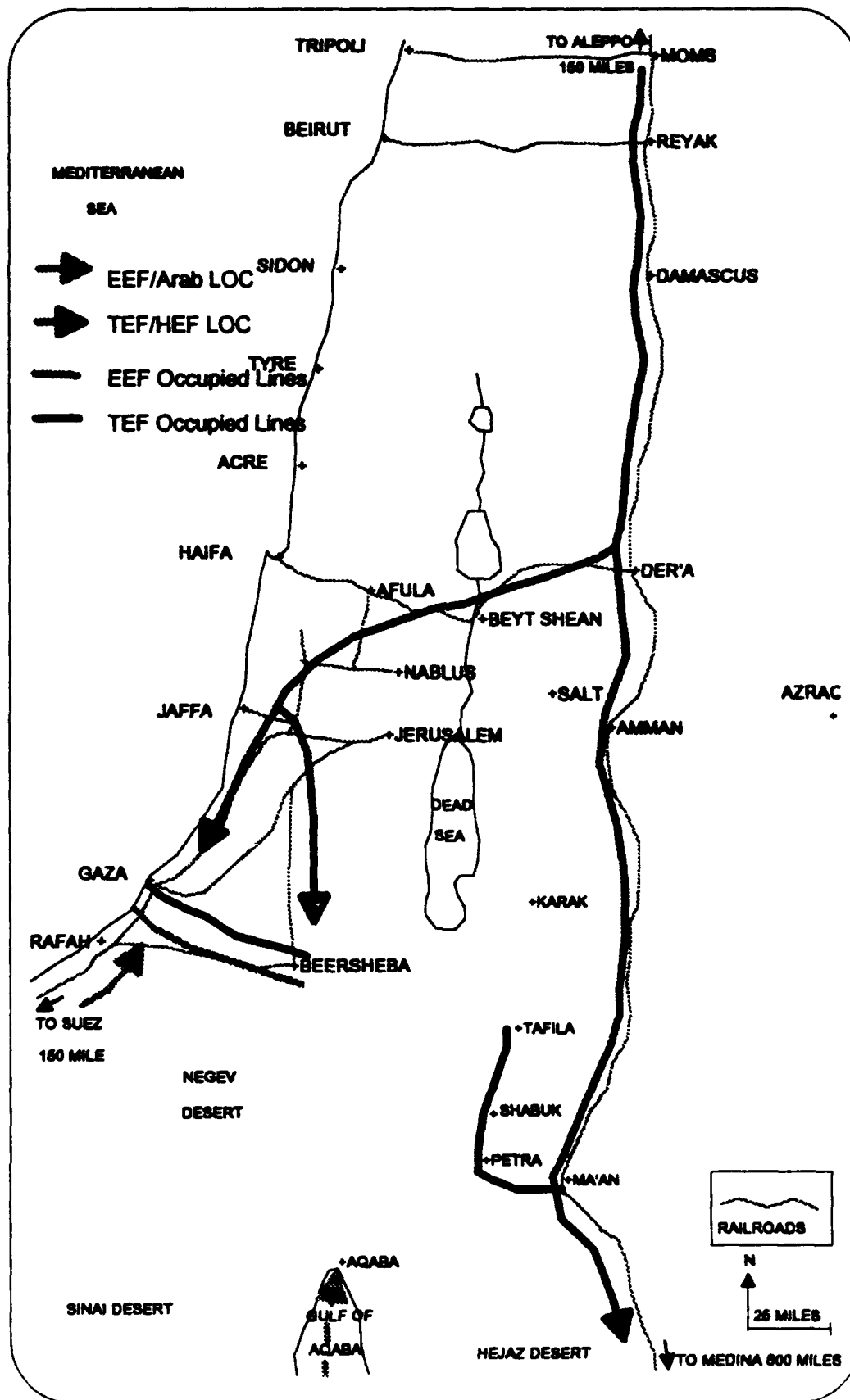


Figure 4A

This map illustrates the military distribution of the Egyptian Expeditionary Force (EEF) and Turkish units in Palestine and Syria during the early 20th century. The map includes the following details:

- Legend:**
 - EEF/Arab Units: Represented by dashed-line rectangles.
 - Turk Units: Represented by solid-line rectangles.
- Geographical Features:**
 - Coastal Area:** Mediterranean Sea, Haifa, Tyre, Sidon, Beirut, Tripoli.
 - Interior:** Nablus, Jerusalem, Beersheba, Gaza, Rafah, Jaffa, Acre, Haifa, Afula, Beyt Shean, Salt, Amman, Karak, Tafilah, Shabuk, Petra, Ma'an.
 - Deserts:** Sinai Desert, Negev Desert, Hejaz Desert.
 - Water Bodies:** Dead Sea, Gulf of Aqaba, Red Sea.
- Military Units and Positions:**
 - EEF/Arab Units:**
 - TEF (Top of the Euphrates Force) near TEF XXXXX.
 - TEF XXXXX near Nablus.
 - TEF XXXXX near Beersheba.
 - TEF XXXXX near Gaza.
 - TEF XXXXX near Rafah.
 - TEF XXXXX near Beersheba.
 - TEF XXXXX near Negev.
 - TEF XXXXX near Aqaba.
 - TEF XXXXX near Hejaz.
 - Turk Units:**
 - TEF XXXXX near TEF XXXXX.
 - TEF XXXXX near Nablus.
 - TEF XXXXX near Beersheba.
 - TEF XXXXX near Gaza.
 - TEF XXXXX near Rafah.
 - TEF XXXXX near Beersheba.
 - TEF XXXXX near Negev.
 - TEF XXXXX near Aqaba.
 - TEF XXXXX near Hejaz.
- Other Markings:**
 - TO ALEPPO 160 MILES.
 - TO SUEZ 160 MILE.
 - TO MEDINA 800 MILES.
 - RAILROADS (indicated by a dashed line).
 - Scale: 25 MILES.
 - North Arrow (N).

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Arab and EEF Attacks, July 1917 to December 1917

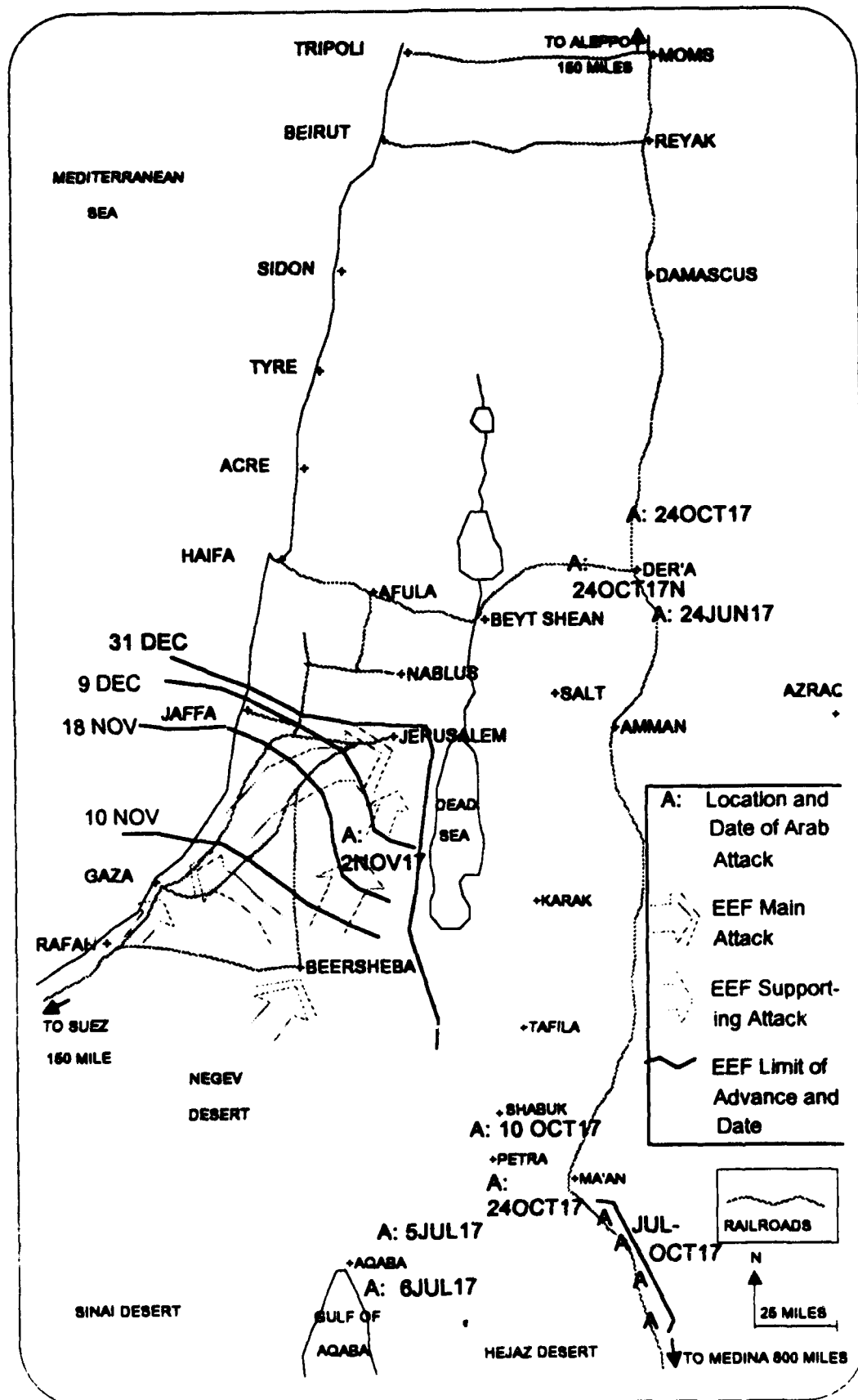


Figure 4C

Lines of Communication, January 1918 to October 1918

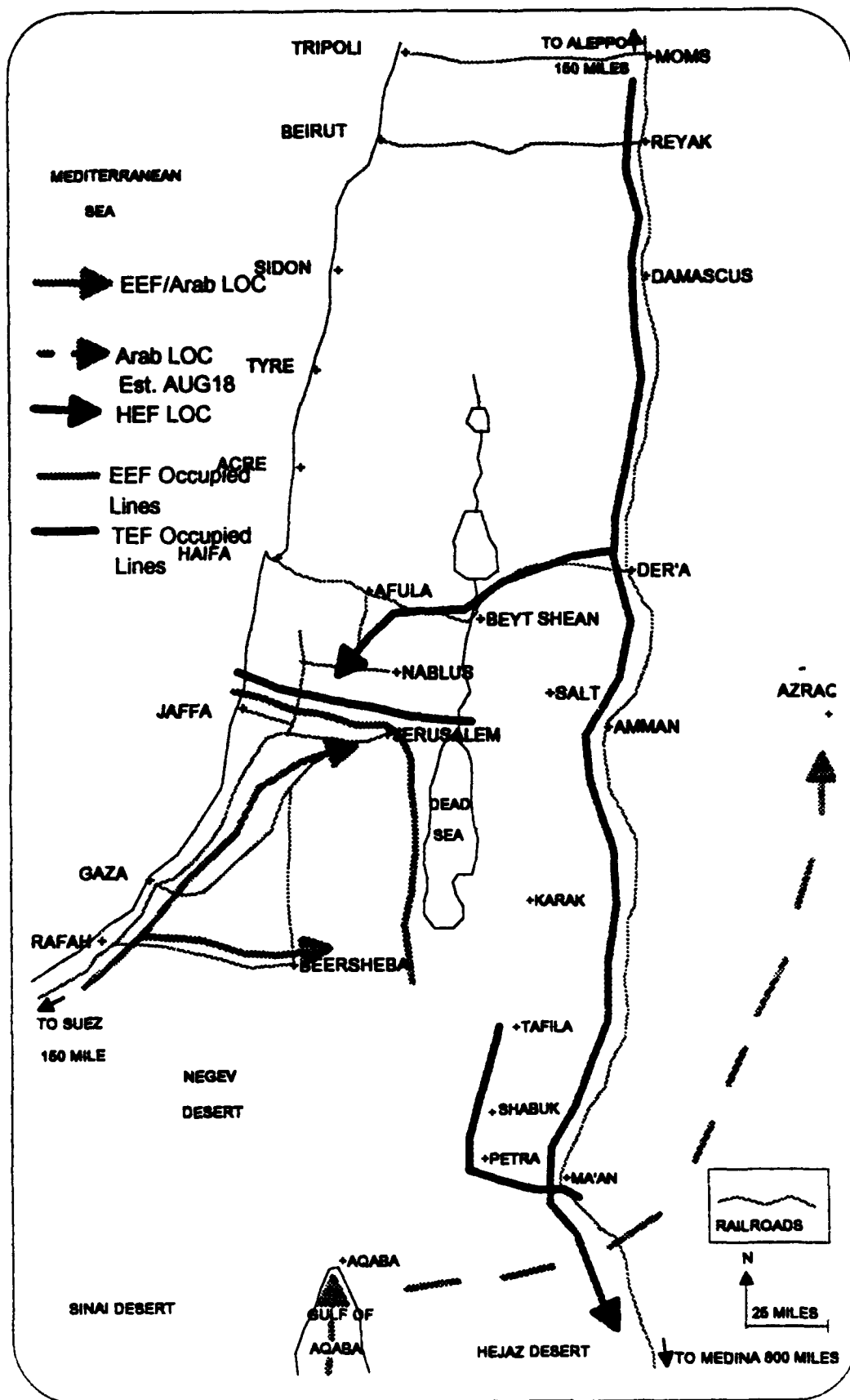


Figure 5A

This map illustrates the military situation in Palestine and the surrounding regions of Syria, Transjordan, and the Sinai Peninsula as of August 1918. The map is oriented with North at the top.

Geographical Features and Regions:

- Mediterranean Sea:** Located to the west of the main landmass.
- Red Sea:** Located to the south, with the Gulf of Aqaba and the Sinai Desert to its west.
- Negev Desert:** Located in the southern part of the main landmass.
- Hejaz Desert:** Located to the east of the main landmass.
- Sinai Desert:** Located to the southwest, bordering the Red Sea.

Key Locations and Towns:

- North:** Tripoli, Beirut, Tyre, Acre, Haifa, Sidon, Momb, Reyak, Damascus.
- Central:** Tef, Der'a, Beyt Shean, Nablus, Jerusaleem, Jaffa, Gaza, Beersheba, Karak, Tafilah, Shabuk, Petra, Ma'an, Hef, Azrac.
- South:** Aqaba, Gulf of Aqaba.

Military Units and Forces:

- EEF/Arab Units:** Represented by dashed-line rectangles. Locations include Tef, Haifa, Jaffa, Gaza, Beersheba, and various locations in the Negev and Sinai (e.g., 21, 20, 21, 20, 21, 20).
- Turk Units:** Represented by solid-line rectangles. Locations include Tef, Haifa, Jaffa, Gaza, Beersheba, and various locations in the Negev and Sinai (e.g., 21, 20, 21, 20, 21, 20).
- Other Units:** Labeled with numbers (e.g., 7, 8, 4, 21, 20) and codes (e.g., XXXX, DMC, EEF, ARAB).

Infrastructure and Movement:

- Railroads:** Indicated by a wavy line symbol.
- Distances:** 160 miles to Aleppo, 160 miles to Suez, 25 miles (scale bar), 800 miles to Medina.
- Compass:** North arrow pointing up.

Legend:

- EEF/Arab Units (dashed rectangle)
- Turk Units (solid rectangle)

As of AUG '18

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Arab and EEF Attacks, January 1918 to October 1918

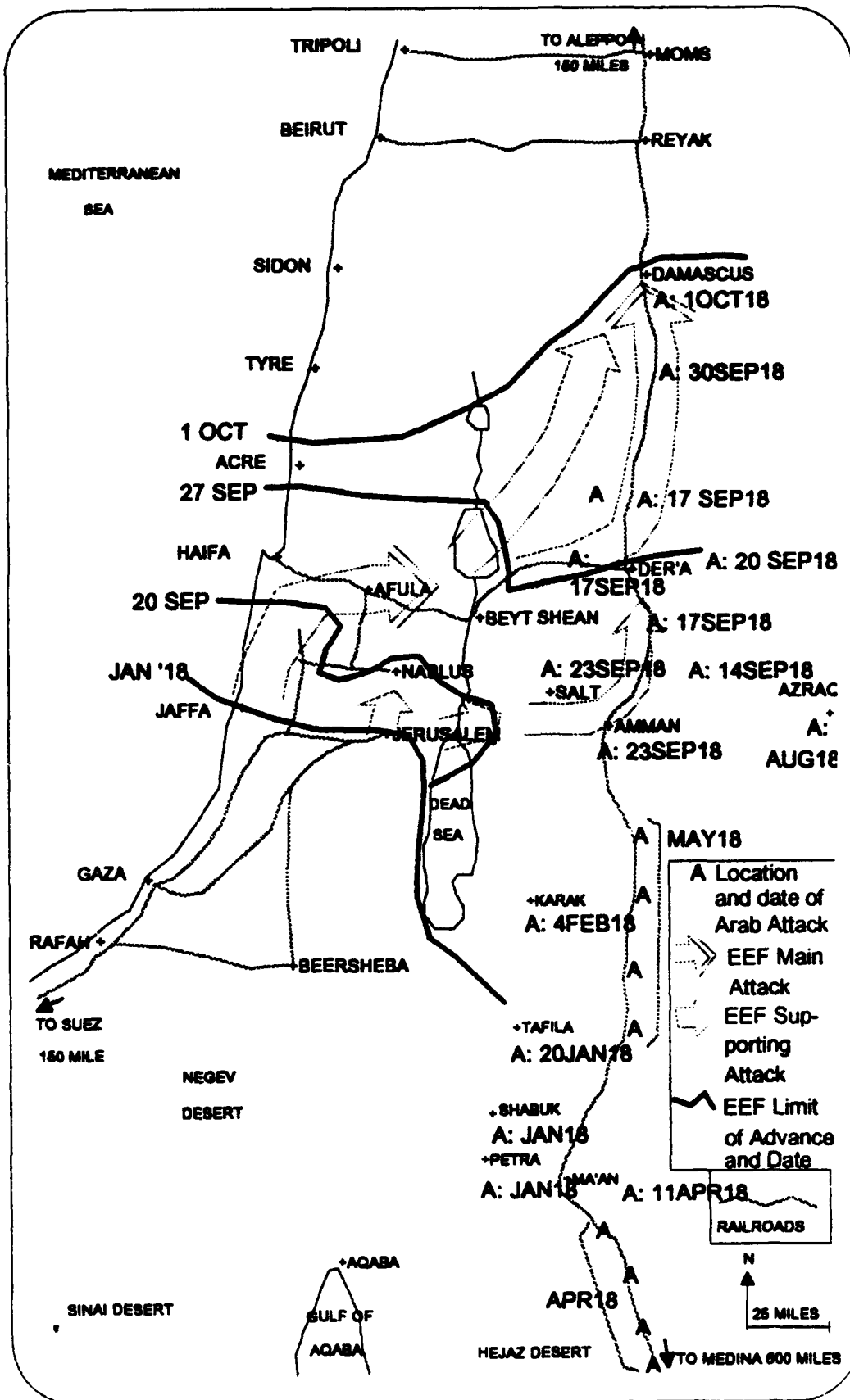


Figure 5C

The Conceptual Framework

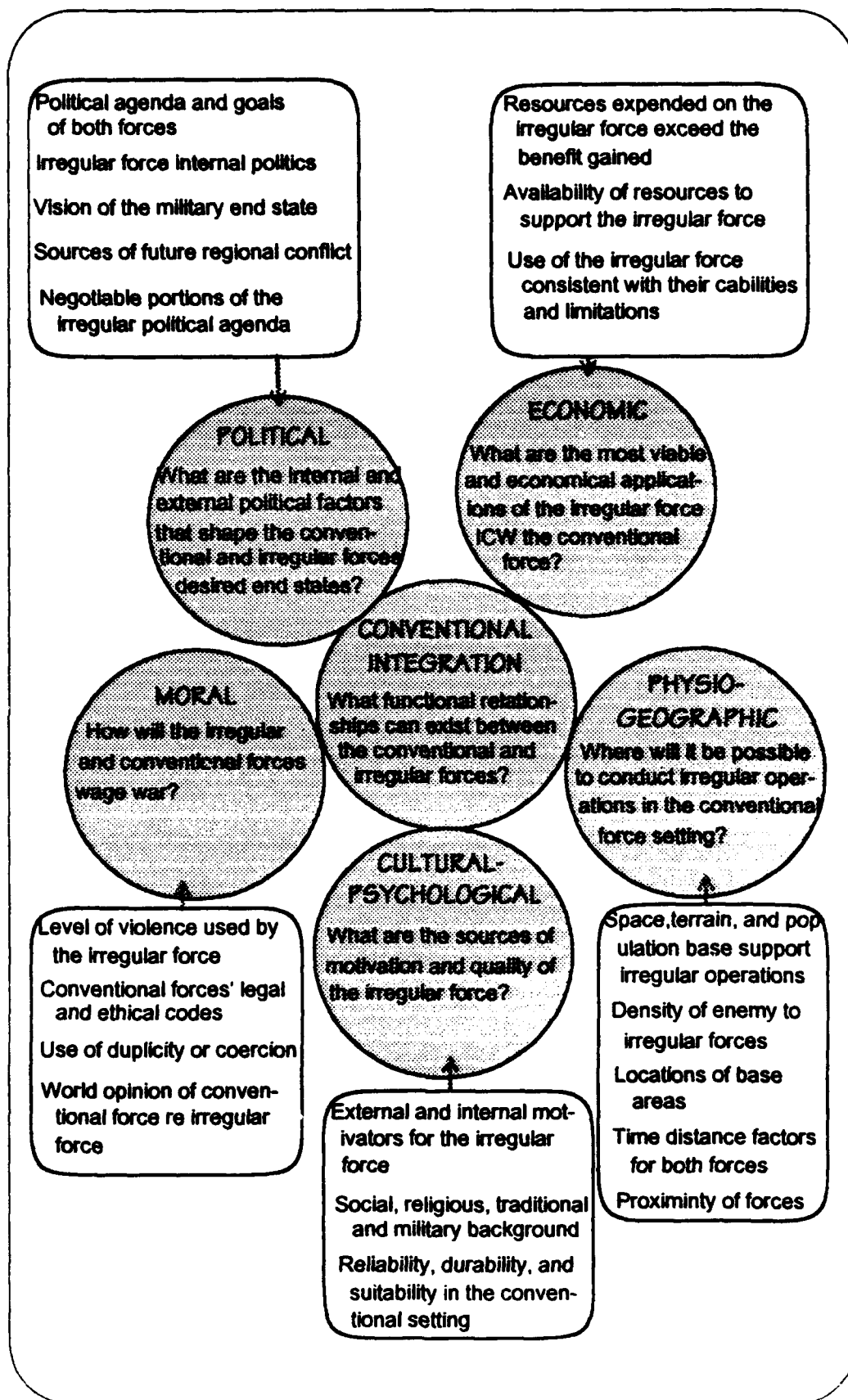


Figure 6

ENDNOTES

¹ The doctrinal publications that form the basis for this statement are: The Joint Staff, JCS PUB 3-0, Doctrine for Unified and Joint Operations (Test Publication) (Washington: Department of Defense, The Joint Chiefs of Staff, January 1990), xi-xii, II-2. JCS PUB 3-05, Doctrine for Joint Special Operations (Final Draft) (Washington: Department of Defense, The Joint Chiefs of Staff, January 1990), xxxi-xxxii, I-12-1-14, II-4-8, IV-5-7. National Defense University, AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces (Draft) (Norfolk, Virginia: Armed Forces Staff College, October 1991), p. xxxi-xxxii, I-12-1-14, II-4-8, and IV-5-7. US Army, FM100-5, Operations (Final Draft) (Washington: Department of the Army, January 1993), 2-32-2-34. US Army, FM100-6, Large Unit Operations (Coordinating Draft) (Fort Leavenworth, Kansas: US Army Command and General Staff College, September 1987), 2-3-2-4.

² A salient example of this condition exists in Iraq. Iraqi conventional forces nominally coexist with both the Kurd population in the north, and with the so called Marsh Arabs in the Euphrates River valley. Both of these latter groups are ripe for exploitation as irregular forces and they are located on or astride potential employment areas for conventional forces. Other examples of similar situations exist in Bosnia-Herzegovina, Iran, Cuba, and North Korea. "The World's Armed Conflicts," The New York Times, 11 April 1993: D, 11b-c.

³ The term, economy of force, is used to limit the irregular forces to a supporting role within a conventional theater of operations, versus a role as the main effort in an unconventional theater. US Army, FM100-5, Operations (Final Draft) (Washington: Department of the Army, January 1993), 2-8. FM100-25, Doctrine for Army Special Forces (Approved Final Draft) (Washington: Department of the Army, April 1991), 2-13. The Joint Staff, JCS PUB3-0, Doctrine for Unified and Joint Operations (Test Publication) (Washington: Department of Defense, The Joint Chiefs of Staff, January 1990), A-2. JCS PUB3-05, Doctrine for Joint Special Operations (Final Draft) (Washington: Department of Defense, The Joint Chiefs of Staff, January 1990), E-6.

⁴ This discussion is not intended to exclude the possibility of irregular forces coming from a more urban, modern social grouping. The key point is that the more modern the population is, the less likely they are to have the inherent qualities that one seeks in an irregular.

⁵ Thomas A. Dempsey, "Desert Guerrillas: Combat Multipliers for Central Command," Defense Analysis 5 (December 1989): 342-343. Jeremy Wilson, Lawrence of Arabia (London: Heinemann, 1989), 960-965.

⁶ Ibid., Dempsey, 343-349, and Wilson, 960-965.

⁷ T.E. Lawrence, Seven Pillars of Wisdom (New York: Viking Penguin Inc., 1986), 193-202, and "The Evolution of a Revolt," (Combat Studies Institute Reprint: Fort Leavenworth, Kansas, undated), 22.

⁸ The concept of the time required to complete an operation is inferred from Lawrence's experiences in coordinating, positioning forces, and attacking multiple, dispersed targets along the Turk Fourth Army line of communication during the period from July through September 1918. Jeremy Wilson, Lawrence of Arabia (London: Heinemann, 1989), 518-541.

⁹ T.E. Lawrence, Seven Pillars of Wisdom (New York: Viking Penguin Inc., 1986), 199-200, and "The Evolution of a Revolt," (Combat Studies Institute Reprint: Fort Leavenworth, Kansas, undated), 17, 22.

¹⁰ T.E. Lawrence, "The Evolution of a Revolt," (Combat Studies Institute Reprint: Fort Leavenworth, Kansas, undated), 22.

¹¹ James J. Schneider, "T.E. Lawrence," Strategy & Tactics 152 (June 1992): 17.

¹² Thomas A. Dempsey, "Desert Guerrillas: Combat Multiplier for Central Command," Defense Analysis 5 (December 1989), 346.

¹³ US Army, FM100-5, Operations (Final Draft) (Washington: Department of the Army, January 1993), 2-8, FM100-5, Operations (Washington: Department of the Army, 1986), 174-175, US Marine Corps, FMFM1, Warfighting (Washington: Department of the Navy, 1989), 31, 73, FMFM1-1, Campaigning (Washington: Department of the Navy, 1990), 33, US Air Force, AFM1-1 (Volume II), Basic Aerospace Doctrine of the United States Air Force (Washington: Department of the Air Force, 1992), 11, and The Joint Staff, JCS PUB 3-0, Doctrine for Unified and Joint Operations (Test Publication) (Washington: Department of Defense, The Joint Chiefs of Staff, January 1990), A-2.

¹⁴ US Army, FM100-5, Operations (Washington: Department of the Army, 1986), 175, and US Air Force, AFM1-1 (Volume II), Basic Aerospace Doctrine of the United States Air Force (Washington: Department of the Air Force, 1992), 11.

¹⁵ The concept of judicious application comes from Bernard Brodie, Strategy in the Missile Age (Princeton, New Jersey: Princeton University Press, 1965), 26-27, and US Air Force, AFM1-1 (Volume II), Basic Aerospace Doctrine of the United States Air Force (Washington: Department of the Air Force, 1992), 11.

- ¹⁶ Cyril Falls, Armageddon: 1918 (Philadelphia: J.B. Lippencott Company, 1964), 169, and Jeremy Wilson, Lawrence of Arabia (London: Heinemann, 1989), 935.
- ¹⁷ Jeremy Wilson, Lawrence of Arabia (London: Heinemann, 1989), 16.
- ¹⁸ A.P. Wavell, "The Palestine Campaign," (School of Advanced Military Studies Reprint, US Army Command and General Staff College, Academic Year 1989-1990), 1-13.
- ¹⁹ Sulayman Musa, T.E. Lawrence. An Arab View (London: Oxford University Press, 1966), John E. Mack, A Prince of Our Disorder (Boston: Little, Brown and Company, 1976), and R. Aldington, Lawrence of Arabia: A Biographical Enquiry (London: Collins, 1955), all contain a highly critical appraisal of the role that Lawrence and the British forces played in the Middle East during World War I.
- ²⁰ Archibald Murray, Sir Archibald Murray's Despatches (London: J.M. Dent & Sons, 1920), 58, 130-131, 173.
- ²¹ All figures cited on unit strengths, and casualties were compiled from, Peter Young, ed., The Marshall Cavendish Illustrated Encyclopedia of World War I (New York: Marshall Cavendish, 1984). See the bibliographic entries for a complete listing of the pertinent articles.
- ²² Charles L. Parnell, "Lawrence of Arabia's Debt to Sea Power," United States Naval Institute Proceedings 105 (August 1979): 76, 80.
- ²³ T.E. Lawrence, Seven Pillars of Wisdom (New York: Viking Penguin Inc., 1986), 244.
- ²⁴ Although the Turks could have left Medina any time they wanted to, they chose not to. This was due in the most part to the presence of the hostile Arab forces and to their political desire to maintain control of the Holy City.
- ²⁵ Liman von Sanders, Five Years in Turkey (Annapolis, Maryland: Naval Institute Press, 1927), 207.
- ²⁶ There was much concern on the part of the British General Staff that they would lose the support of their Islamic colonial forces if they were not perceived as supporting the Sherif of Mecca. This was especially true of the Indian and Egyptian forces serving in the British Army.
- ²⁷ See note 24, above.

²⁸ T.E. Lawrence, "The Evolution of a Revolt," (Combat Studies Institute Reprint, US Army Command and General Staff College, undated), 22.

²⁹ Liman von Sanders, Five Years in Turkey (Annapolis, Maryland: Naval Institute Press, 1927), 273-274.

³⁰ Brian Gardner, Allenby of Arabia (New York: Coward-McCann, Inc., 1956), 189-190.

³¹ The concepts of operational design and the operational planning methodology are from, US Army, FM100-5, Operations (Final Draft) (Washington: Department of the Army, January 1993), 7-9-7-14, and the National Defense University, AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces (Draft) (Norfolk, Virginia: Armed Forces Staff College, October 1991), II-3-8-II-3-12.

³² Antoine H. Jomini, Summary of the Art of War, in Roots of Strategy, Book 2 (Harrisburg, Pennsylvania: Stackpole Books, 1987), 170, Carl von Clausewitz, On War, edited by Michael Howard and Peter Paret (Princeton, New Jersey: Princeton University Press, 1976), 196, and US Army, FM100-5, Operations (Final Draft) (Washington: Department of the Army, January 1993), 7-11.

³³ US Army, TRADOC PAM 11-9, Blueprint of the Battlefield (Final Draft) (Fort Monroe, Virginia: US Army Training and Doctrine Command, December 1990), C1-C27.

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